## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0056502; AI 19418; PER20060001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Town of Many
Many Wastewater Treatment Plant
P.O. Box 1330
Many, LA 71449

II. **PREPARED BY:** Ronda Burtch

**DATE PREPARED:** August 2, 2006

III. **PERMIT ACTION:** reissue LPDES permit LA0056502, AI 19418; PER20060001

LPDES application received: March 8, 2006

LPDES permit issued: April 1, 2001
LPDES permit expired: March 31, 2006

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Many.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located at 543 Shuteye Road in Many, Sabine Parish.

D. The treatment facility consists of a mechanical treatment plant. Disinfection is by chlorination.

E. Outfall 001

Discharge Location: Latitude 31° 33' 45" North
Longitude 93° 30' 19" West

Description: treated sanitary wastewater

Design Capacity: 0.75 MGD

Type of Flow Measurement which the facility is currently using:

Continuous Recorder

V. **RECEIVING WATERS:**

The discharge is into San Jose Creek, thence into Bayou LaNana, thence into the Toledo Bend Reservoir in segment 110101 of the Sabine River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 110101 of the Sabine River Basin are as indicated in the table below[1/]:

| *Overall* Degree of Support for Segment 110101 | *Degree of Support of Each Use* | | | | | | |
|---|---|---|---|---|---|---|---|
| Partial | Primary Contact Recreation | Secondary Contact Recreation | Propagation of Fish & Wildlife | Outstanding Natural Resource Water | Drinking Water Supply | Shellfish Propagation | Agriculture |
| | Full | Full | Not Supported | N/A | Full | N/A | Full |

[1/]The designated uses and degree of support for Segment 110101 of the Sabine River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

## VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 110101 of the Sabine River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

## VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

## VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Ronda Burtch
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

## IX. PROPOSED PERMIT LIMITS:

Subsegment 110101, Toledo Bend Reservoir - Texas-Louisiana line to Toledo Bend Dam, is listed on LDEQ's Final 2004 303(d) List as impaired for mercury. To date not TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Sabine River Basin, those suspected cause for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which would be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

The mercury impairment of this subsegment is due to atmospheric deposition. Therefore, the Department believes that there is little potential for the discharges to cause or contribute to the mercury impairment of this subsegment. Therefore, no limitations for mercury will be required of this facility.

**Final Effluent Limits:**

**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

| Effluent Characteristic | Monthly Avg. (lbs./day) | Monthly Avg. | Weekly Avg. | Basis |
|---|---|---|---|---|
| $BOD_5$ | 63 | 10 mg/l | 15 mg/l | Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size. |
| TSS | 94 | 15 mg/l | 23 mg/l | Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. |

**Other Effluent Limitations:**

**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTWs must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

## X. PREVIOUS PERMITS:

**LPDES Permit No. LA0056502:** Issued: April 1, 2001
Expired: March 31, 2006

| Effluent Characteristic | Discharge Limitations | | Monitoring Requirements | |
|---|---|---|---|---|
| | Daily Avg. | Daily Max. | Measurement Frequency | Sample Type |
| Flow | Report | Report | Continuous | Recorder |
| $BOD_5$ | 10 mg/l | 15 mg/l | 1/week | 3-Hour Composite |
| TSS | 15 mg/l | 23 mg/l | 1/week | 3-Hour Composite |
| Fecal Coliform Colonies | 200 | 400 | 1/week | Grab |

## XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

**A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning September 5, 2004 and ending August 1, 2006 for this facility.

Date – July 7, 2005
Inspector - LDEQ
Findings and/or Violations -

1. Operations and maintenance were rated unsatisfactory.
    a. One of the two rotors in the aeration basin/oxidation ditch was inoperable.
    b. One of the two clarifiers was inoperable.
    c. Accumulation of floating solids in the clarifier and chlorine contact chamber.
2. Effluent was also rated unsatisfactory due to chronic permit exceedances. The facility's discharge monitoring reports revealed permit exceedances for $BOD_5$, TSS, and fecal coliform.

Date – October 7, 2005
Inspector - LDEQ
Findings and/or Violations –

1. The inspection was conducted in response to citizen complaints received by the Department concerning a release of raw sewage that occurred from the sewage treatment facility.
2. The incident occurred on September 24 as a result of a power outage associated with the effects of Hurricane Rita.
3. The overflowing sewage escaped into ditches on the plant site that is tied into an open culvert that drains through the levee to the receiving stream, San Jose Creek. It is assumed that the overflow occurred for several hours until the town's water tank drained down. There were unconfirmed reports that as much as 200,000 gallons may have escaped.
4. The sewage release also coincided with a fish kill that occurred a few days later in a segment of Bayou LaNana downstream of the facility. The fish kill occurred roughly ten miles downstream of the plant. The cause of the fish kill was believed to have been oxygen depletion, but the investigation was inconclusive as to whether or not the sewage release contributed to the problem.
5. One of the complainants of the Sabine River Authority said that he noticed a change in the condition of the water in the bayou on Wednesday, September 28, and began observing large numbers of dead fish on the morning of September 29. He also observed what appeared to be feces floating in the water. Other complainants reported making similar observations.
6. The investigation on Monday, October 3, revealed that water conditions in the bayou had cleared up to some degree.
7. The intake structure for the Town of Many's water treatment plant is also located in this area of the bayou. The Sabine Parish Health Unit took samples of the treated water during the time of the incident and reported that the water was safe to drink.
8. A subsequent visit was performed on October 6 to check the condition of the San Jose Creek and the upper end of Bayou LaNana.

Date – October 20, 2005
Inspector – LDEQ
Findings and/or Violations:

1. An investigation was conducted in response to a sewerage system overflow reported by the Town of Many on 10-15-05. The release occurred on 10-14-05 as a result of malfunction of a lift station located on Middlecreek Road in Many.
2. Town representative Jeremy Koss, Sewage Treatment Plant Operator, was contacted by phone on 10-18-05 concerning the incident, and a site inspection was conducted with him on 10-20-05. He said that the problem occurred when a high level switch failed to activate at the lift station and a belt broke on one of the pumps causing sewage to overflow from a nearby manhole. He said that there was no estimate of the amount of sewage released but that the overflow occurred for approximately 15 hours from 8:00 PM until 11:00 AM the following morning.
3. The inspection revealed that the lift station was back in service and that the site was cleaned up well. Mr. Koss said that they used chlorine bleach to disinfect the area. The overflow entered a local drainage ditch but did not impact a named stream course. This site is located within the drainage basin of San Jose Creek.
4. The Town of Many submitted a written report of the incident as required.

Date – November 2, 2005
Inspector – LDEQ
Findings and/or Violations –

1. An investigation was conducted in response to a sewerage system overflow reported by the Town of Many on 11-1-05. The overflow occurred on 10-31-05 as a result of a loss of power to their wastewater treatment plant.

2. A site inspection was conducted this date (11-2-05) with town representative Jeremy Koss, Plant Operator. At the time of the incident, overflow occurred from the wet well of the main lift station which is located on the plant site. The overflow entered a ditch on the plant site which flows to an old pump house structure from which it drains through the plant levee to San Jose Creek. Additional overflow occurred from a manhole located across the road from the treatment plant. Overflow from this manhole entered a roadside ditch. Mr. Koss said that there was no estimate of the amount of raw sewage released but that the overflow occurred for approximately 5 1/2 hours from 5:00 PM until 10:30 PM. He said that the sewage was diluted with rainwater. Power was restored to the plant at 12:15 AM. Mr. Koss also said that they used HTH and bleach as disinfectants and flushed the ditches with fresh water.
3. The inspection revealed no ongoing problems. The town also submitted a written report of the incident as required.

Date – December 29, 2005
Inspector - LDEQ
Findings and/or Violations –

1. An investigation was conducted in response to a sewerage system overflow reported on October 15, 2005. The release occurred on October 14 as a result of malfunction of a lift station located on Middlecreek Road in Many.
2. The sewage treatment plant operator said that the problem occurred when a high level switch failed to activate at the lift station and a belt broke on one of the pumps causing sewage to overflow from a nearby manhole. He said there was no estimate of the amount of sewage released but that ht overflow occurred for approximately 15 hours.
3. The inspection revealed that the lift station was back in service and that the site was cleaned up well.
4. The overflow entered a local drainage ditch but did not impact a named stream course.

Date – January 5, 2006
Inspector - LDEQ
Findings and/or Violations –

1. An investigation was conducted in response to a sewerage system overflow reported the Town of Many on November 1, 2005. The overflow occurred on October 31 as a result of a loss of power to their wastewater treatment plant.
2. A site inspection was conducted on November 2, which revealed that the overflow entered a ditch on the plant site which flows to an old pump house structure from which it drains through he plant levee to San Jose Creek.
3. Additional overflow occurred from a manhole located across the road from the treatment plant. Overflow from this manhole entered a roadside ditch. The plant operator said that there was no estimate of the amount of raw sewage released but that the overflow occurred for approximately 5 ½ hours.

Date – May 22, 2006
Inspector - LDEQ
Findings and/or Violations –

1. The WWTP is experiencing inflow & infiltration during heavy rainfall events. Design capacity is 0.75 MGD and outfall 001 records showed several effluent flows over 1MGD. Smoke testing was completed two months ago in the Town's collection lines to target inflow and infiltration.
2. The WWTP experienced a few permit exceedences in 2005 due to power failures during storm events.
3. WWTP Operators document all maintenance and process control tests.
4. All treatment works were operational and no permit exceedences have been reported since October 2005.
5. A renewal LPDES permit application has been submitted.
6. Jeremy Koss was present during the inspection and exit interview.

**B) Compliance and/or Administrative Orders**

A review of the files indicates the following most recent enforcement actions administered against this facility:

**LDEQ Issuance:**

Docket # - WE-C-05-0400
Date Issued – February 24, 2006
Findings of Fact:

1. The Respondent owns and/or operates a publicly owned treatment works that serves the businesses and residences of the Town of Many, located at 543 Shuteye Road, Many, Sabine Parish, Louisiana. The Respondent is authorized to discharge treated sanitary wastewater into San Jose Creek, thence into Bayou LaNana, thence into the Toledo Bend Reservoir, all waters of the state, under the authority of LPDES permit LA0056502 issued on April 1, 2001.
2. An inspection conducted on or about May 19, 2004, revealed that the Respondent failed to provide adequate operations and maintenance on its POTW which caused an unauthorized discharge of treated sanitary wastewater into waters of the state.
3. An inspection conducted on or about June 14, 2005, revealed that the Respondent failed to provide adequate O & M on its POTW. Specifically, the facility experiences severe I & I during rainfall events. The design capacity of the POTW is 0.75 MGD; a review of the flow/effluent records revealed flow levels during wet weather conditions can reach as high as 3 MGD. Also noted was that one of the two rotors in the oxidation ditch was not operating, one of the two clarifiers was not operating, and there was an abundance of floating solids in the clarifier and in the chlorine contact chamber.
4. An inspection on or about October 3, 2005, revealed that he Respondent failed to provide adequate O&M on its POTW and subsequently did cause or allow an unauthorized discharge of untreated sanitary wastewater into the waters of the state.
5. An inspection conducted on or about October 20, 2005, revealed that the Respondent failed to provide adequate O&M, which did cause or allow an unauthorized discharge of untreated sanitary wastewater into waters of the state at a location not authorized in LPDES permit LA0056502.
6. An inspection conducted on or about November 2, 2005, revealed that the Respondent failed to provide adequate O&M on its POTW and subsequently did cause or allow an unauthorized discharge of untreated sanitary wastewater. Specifically, the facility experienced a loss of electrical power for approximately 5 ½ hours with no means of back-up or auxiliary power.
7. Also noted during the inspection on November 2, 2005, the Respondent failed to provide adequate O&M which cause or allow an unauthorized discharge of wastewater into waters of the state at a location not authorized in LPDES permit LA0056502.
8. A file review conducted on or about January 30, 2006, revealed numerous effluent violations.
9. Further file review conducted on or about January 30, 2006, revealed that the Respondent failed to reapply for LPDES permit LA0056502 in a time manner.
10.

Order:

1. To immediately take any and all steps necessary to meet and maintain compliance with the permit.
2. To submit to the Office of Environmental Services, a completed renewal

application.

3. To continue to comply with all the terms and conditions of LPDES permit LA0056502, until the renewed permit is issued or until otherwise notified by the Department in writing.
4. In the event the Respondent believes that complete correction of the above cited deficiencies is not physically possible, the Respondent shall submit a comprehensive plan for the expeditious elimination and prevention of such noncomplying discharges.
5. To submit to the Enforcement Division, a written report that includes a detailed description of the circumstances surrounding the cited violations and actions taken or to be taken to achieve compliance with the Order Portion of this Compliance Order.

C) **DMR Review**

A review of the discharge monitoring reports for the period beginning June 1, 2004 through May 31, 2006, has revealed the following violations:

| Month | Parameter | DMR Reported Value | Permit Limit |
|---|---|---|---|
| November 2004 | $BOD_5$, Monthly Loading | 71.1 lbs/day | 63 lbs/day |
| | TSS, Monthly Loading | 119.7 lbs/day | 94 lbs/day |
| March 2005 | Fecal Coliform, Weekly Avg. | >6,000 col/100 ml | 400 col/100 ml |
| July 2005 | $BOD_5$, Monthly Loading | 135.8 lbs/day | 63 lbs/day |
| | $BOD_5$, Monthly Avg. | 21.8 mg/l | 10 mg/l |
| | $BOD_5$, Weekly Avg. | 58.7 mg/l | 15 mg/l |
| | TSS, Monthly Loading | 1,124.2 lbs/day | 94 lbs/day |
| | TSS, Monthly Avg. | 149.2 mg/l | 15 mg/l |
| | TSS, Weekly Avg. | 560 mg/l | 23 mg/l |
| | Fecal Coliform, Weekly Avg. | >6,000 col/100 ml | 400 col/100 ml |

- **Please note that the following discharge monitoring reports were missing from the file and/or have not been submitted to the Department: June – July 2004, September – October 2004, December 2004 – February 2005, April 2005, August – November 2005, and February 2006.**

## XII. ADDITIONAL INFORMATION:

The nearest drinking water intake, Many Water System, is located 6-10 miles downstream from the discharge point. The Department believes that due to the distance of the drinking water intake from the discharge point, no additional limitations will need to be required for this facility.

Please be aware that the Department will be conducting a TMDL in the Sabine River Basin scheduled for completion in 2007. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.750 MGD.

Effluent loadings are calculated using the following example:

BOD: 8.34 lb/gal x 0.750 MGD x 10 mg/l = 63 lb/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.50 and 1.00 MGD.

| Effluent Characteristics | Monitoring Requirements | |
|---|---|---|
| | Measurement Frequency | Sample Type |
| Flow | Continuous | Recorder |
| $BOD_5$ | 1/week | 3 Hr. Composite |
| Total Suspended Solids | 1/week | 3 Hr. Composite |
| Fecal Coliform Bacteria | 1/week | Grab |
| pH | 1/week | Grab |

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

## XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

## XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Many, Many Wastewater Treatment Plant, March 8, 2006.